DETAILED ACTION

Continued Examination under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 10, 2010 has been entered.

Information Disclosure Statement

2.   The information disclosure statement (IDS) filed on 3/31/2011 and 5/18/2011 has been considered.

Response to Amendment

3.   This action is response to the Amendment filed on May 10, 2010.

4.   Claims 64, 71-75 have been amended. Claims 64-83 are currently pending.

5.   Applicant's arguments with respect to claims 64-83 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States

before the invention by the applicant for patent, except that an international application filed under the treaty

defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the

United States only if the international application designated the United States and was published under Article

21(2) of such treaty in the English language.

7.   Claims 64-83 are rejected under 35 U.S.C. 102(e) as being anticipated by

Alriksson et al. (US PAT 6,977,938 B2).

        Regarding claim 64,Alriksson discloses" A gateway (G and G2 –Figure 4) for

forwarding transmission information between a first terminal node (FA –figure 6) of a

first network and a second terminal node(IWU –Figure 6) of (Col. 8: 20-26 which recites

an ad hoc network (a second terminal node), ad hoc network Mobile IP foreign agents

are used as Internet gateways (A gateway) between an ad hoc network and the

Internet (first network)) wherein the first terminal node is addressable by a global

source address (internet access with Home address) and a second terminal node is

addressable by an ad hoc destination address (Col. 8:35-40, which recite ad hoc

network by looking at the IP address), the gateway comprising":

        "A transmission/reception unit (Col. 9:32-42 which recites the node acting as a

gateway when receiving a route request) adapted to receive transmission information

from said first terminal node and to transmit said transmission information to said

second terminal node (Col. 9:33-42 which recite forward the (first terminal node)

request, in case where the destination is connected behind the gateway, i.e. in the ad

hoc network) (second terminal node);

"an acknowledgment (Col. 9:37-43 which recite RESPONSE, from the

destination (second terminal node), send a proxy route reply) information detection unit

(Col. 9:44-52 which recite a node detect see the flowchart of FIG. 2 in which the steps

executed in the route discovering procedure (detection)) adapted to detect the receipt of

acknowledgment information from said second terminal node acknowledging that said

second terminal station has received said transmission information;

"Wherein said transmission/reception unit comprises a first tunnel setup unit

(Col. 10:43-58 which recite tunnel setup by tunnel the packet to the Internet gateway)

for setting up a first tunnel link between said gateway and said second terminal node by

encapsulating a transmission packet (Col. 10:43-58, Which recites the tunneling can be

accomplished by either encapsulation or source routing of transmission packet)

received from said first terminal node and having a global source address of said first

terminal node and a global destination address of said second terminal node into a

modified transmission packet (Col. 12: 1-4 which recite modifications must be made to

the communication between the foreign agent and the visiting node) having an ad hoc

source address (Col.12:15-25 which recite modify the address of said gateway by using

this host route packets are directed to a virtual interface in which they are encapsulated

with the foreign agent as the destination IP address, and sent back using the IP to be

routed to the foreign agent) and an ad hoc destination address of said second terminal

node, wherein said transmission/reception unit transmits said transmission information

and receives said acknowledgment information to and from said second terminal node

respectively through said first tunnel link (Col. 12:30-32, which recites traffic that will

leave the ad hoc network is traffic that is tunneled to the foreign agent from a registered

node) .

Regarding claims 65 and 76, Alriksson discloses "characterized by an accounting

unit (Col. 13, which recites act as an accounting unit unless is acknowledged from ad

HOC node) otherwise, this is a costly operation. As an alternative, instead of

periodically broadcasting agent advertisements they can be unicast to register nodes

only. If only a small fraction of the nodes in the ad hoc network are visiting nodes, this

will ensure less traffic in the ad hoc network) adapted to determine charging information

for the transmission of said transmission information to said second terminal node if

said acknowledgment information detection unit detects the receipt of acknowledgment

information for the transmission of said transmission information to said second terminal

station".

Regarding claims 66 and 77, Alriksson discloses "characterized by transmission

information characteristics determining unit adapted to determine transmission

characteristics of the transmission of said transmission information to said second

terminal node" (Col. 9:1018 which recite the transmission information distributing routing

information from the fixed Internet into the ad hoc network is to let the Internet gateways

use proxy route replies and added semantics and proxy replies is hereinafter referred

to as proxying (adapted to), which would allow any gateway to participate in the route

discovery process)wherein detect the second network(Ad HOC node).

Regarding claims 67 and 78, Alriksson discloses "characterized in that said

transmission information characteristics determining unit is adapted to determine as

said transmission characteristics one or more selected from the group consisting of a

data amount, a transmission speed (Col. 9 :10-15 which recite data flow information

enable gateways equally supporting data flow from an ad hoc network to the Internet to

be utilized) , a transmission route (Col. 8:30-35, which recite transmission route

information that default routes and network routes are incorporated into routing in a

Mobile Ad Hoc Network) along which said transmission information has been

transmitted to said second terminal node, and a delay time (Col. 13: 31-38 which recite

delay time to prevent several visiting nodes from broadcasting agent solicitations, they

have to wait for a certain amount of time (delay time)before they are allowed to

transmit) of the packet transmission.

Regarding claims 68 ,72 and 81 , Alriksson discloses "characterized in that said

second ad hoc network (Col. 7: 20-24, which recite AD hoc packet switch network as

illustrated in FIG. 1c,) is a packet switched network (Col. 8:41-45 which recite packet

switch network that the foreign agent can then deliver the packets to the node in the ad

hoc network), said transmission information comprises one or more transmission

packets, and said acknowledgement information (Col. 9: 45-60, which recite

acknowledgement information that a node and also for intermediate nodes to receive a

normal route reply (acknowledgement) and potentially many proxy route replies, one

from each gateway connected in the ad hoc network) comprises one or more

acknowledgment packets".

Regarding claims 69 and 79,Alriksson discloses "characterized by an

acknowledgment request unit adapted to transmit to said second terminal node an

acknowledgment request packet including a predetermined sequence number of a

transmission packet which was transmitted but for which no acknowledgement

information has as yet been detected (Col.9: 61-67 which recite no acknowledgement

was received where it is determined in the block 220 that the stored route is not a proxy

route it is determined in a block 240 whether the route reply is a proxy reply) by said

acknowledgment information detection unit, said acknowledgment request message

requesting from said second terminal node the transmission of an acknowledgment

packet acknowledging the receipt of the transmission packet having said predetermined

sequence number" (Col.9: 60-67 which recites that it is determined in a block 230

whether the route reply sequence number is more recent than the stored route).

Regarding claim 70, Alriksson discloses "characterized by a route check unit

(Col.9:10-18 which recite detect unit that gateway to participate in the route discovery

process) adapted to detect whether a transmission route (Col.9: 10-18 which recite

gateways equally supporting data flow from an ad hoc network to the Internet to be

utilized) to said second terminal node exists".

Regarding claims 71,74-75 and 80, Alriksson discloses(Col. 10:24-29 which

recites in the ad hoc network, two of which involve a gateway GW1, GW2 of an ad hoc

network) "A first terminal node (B or A node –Figure 3) for exchanging transmission

information with a second terminal node (E-Figure 3)of another network connected to

said ad hoc network through a gateway, wherein the first terminal node is addressable

by an ad hoc destination address (Nod B ad hoc address192.36.157.71 –Figure 4) and

the second terminal node is addressable by a global resource address (Col. 11: 42-53,

which recite for ad hoc second node to be reachable that the Mobile IP with foreign

agent care-of addresses can then be used in the gateway and when registered with a

foreign agent, a visiting node is routable by its home address(global resource address)

), the first terminal node comprising":

"a transmission/reception unit adapted to receive transmission information from

said another terminal node through said gateway" (Col. 11: 42-54 which recite receive

transmission information from ad hoc network is connected to the Internet there is at

least one node that resides on the border between the ad hoc network and the rest of

the Internet, this node being an Internet gateway).;

"an acknowledgment information transmission unit adapted to transmit to said

gateway acknowledgment information acknowledging (Col. 11: 28-31 which recites the

first gateway G sends a proxy route reply (acknowledgement)back to the node A

announcing the route R2.) that said transmission/reception unit has received said

transmission information";

"wherein said transmission/reception unit comprise a first tunnel setup unit(Col.

10:43-58 which recite tunnel setup by tunnel the packet to the Internet gateway)   for

setting up a first tunnel link between said second terminal node and said gateway by

encapsulating a transmission packet (Col. 10:43-58, Which recites the tunneling can be

accomplished by either encapsulation or source routing of transmission packet)

received from said first terminal node and having a global source address of said first

terminal node and a global destination address of said second terminal node into a

modified transmission packet (Col. 12: 1-4 which recite modifications must be made to

the communication between the foreign agent and the visiting node) having an ad hoc

source address(Col.12:15-25 which recite modify the address of said gateway by using

this host route packets are directed to a virtual interface in which they are encapsulated

with the foreign agent as the destination IP address, and sent back using the IP to be

routed to the foreign agent) of said gateway and an ad hoc destination address of said

second terminal node, wherein said transmission/reception unit receives said

transmission information and transmits said acknowledgment information from and to

said gateway respectively through said first tunnel link" (Col. 12:30-32, which recites

traffic that will leave the ad hoc network is traffic that is tunneled to the foreign agent

from a registered node) .

Regarding claim 73, Alriksson discloses "characterized by a packet

retransmission request unit adapted to transmit to said gateway a retransmission

request packet including a sequence number (Col. 10:5-8 which recites where it is

determined in the block 230 that the route reply sequence is not more recent it is

determined in a block 250 whether the route reply sequence number is equivalent to the

stored route) of a transmission packet which is requested to be retransmitted from said

gateway" (Col. 9: 54-67- Col. 10- 18. Which recite the process in figure 2, the condition

for retransmission or discard block 260 or accept the route reply block 280)

Claim 74, first terminal node is addressable by a global source address and

second terminal node is addressable by an ad hoc destination address. Claim 71 first

terminal node is addressable by an ad hoc destination address and second terminal

node is addressable by a global source address. Communicated between First and

second terminal node have similar limitation

Claim 71 has same limitation as claim 74 and 75 with first and second terminal

node with reversed address and similar communicating process between terminal

nodes. Therefore method claim 74 is rejected for the same reasons as used claim 71.

Method claim 75 is drawn to the method of using the method claimed in claims

74. Therefore method claim 75 is rejected for the same reasons of as used above.

Regarding claims 82 and 83, Alriksson discloses "a computer program product

stored on a computer-readable medium, comprising code sections for respectively

carrying out the functions of the gateway in accordance with claim 74". (Col. 20: 36-39

which recite the invention comprises a computer program product directly loadable into

internal memory (CRM) of a digital computer, comprising software code portions for

performing steps of claim 74 and 75 when the product is run on a computer

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KUO WOO whose telephone number is (571)270-7266.

The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/LESTER KINCAID/
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